

**TABULATION OF PREVAILING WIND DIRECTION AND SPEED (MALAYSIA)**

1. **INTRODUCTION**

The tabulation of prevailing wind direction and speed are summarized based on 10-year historical data obtained from the Malaysian Meteorological Department (MMD).

The data is summarized by region and shall be used in conjunction with GreenRE’s Ventilation Simulation Guideline - Appendix B for projects in Malaysia. Average elevation for wind speed measurement is provided to enable project team to extrapolate wind speed (based on suitable logarithmic or power law function) at required height for simulation.

For projects outside Malaysia, suitable 10-year wind speed data for location in consideration to be reviewed by GreenRE assessors prior to use.

**2. REVISION LOG**

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| --- | --- | --- |
| Revision | Description | Date Effective |
| 1.0 | Issued for implementation | 1st September 2021 |
| 1.0 | Revised version for implementation | 7th Jan 2022 |

**3. WIND DATA**

***Region: Selangor and Kuala Lumpur***

***Elevation: 16.64m***

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | **Direction** | **Mean Speed (m/s)** | | **N** | 1.4 | | **NE** | 1.2 | | **E** | 1.4 | | **SE** | 2.1 | | **S** | 2.6 | | **SW** | 2.4 | | **W** | 2.6 | | **NW** | 2 | |  |

***Region: Perak, Pulau Pinang, Kedah & Perlis***

***Elevation: 3.33 m***

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | **Direction** | **Mean Speed (m/s)** | | **N** | 2.1 | | **NE** | 1.9 | | **E** | 1.7 | | **SE** | 1.6 | | **S** | 2.4 | | **SW** | 2.9 | | **W** | 3 | | **NW** | 3.4 | |  |

***Region: Negeri Sembilan, Melaka & Johor***

***Elevation: 37.8m***

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | **Direction** | **Mean Speed (m/s)** | | **N** | **1.6** | | **NE** | **2.2** | | **E** | **1.8** | | **SE** | **2.1** | | **S** | **2.4** | | **SW** | **2.1** | | **W** | **1.6** | | **NW** | **1.1** | |  |

***Region: Pahang, Terengganu & Kelantan***

***Elevation: 15.23 m***

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | **Direction** | **Mean Speed (m/s)** | | **N** | 1.6 | | **NE** | 2.1 | | **E** | 2.4 | | **SE** | 1.6 | | **S** | 2.1 | | **SW** | 2.4 | | **W** | 1.4 | | **NW** | 1.6 | |  |

***Region: Sarawak (Western)***

***Elevation: 20.86m***

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | **Direction** | **Mean Speed (m/s)** | | **N** | **2.7** | | **NE** | **2.2** | | **E** | **1.6** | | **SE** | **1.7** | | **S** | **1.6** | | **SW** | **1.5** | | **W** | **1.8** | | **NW** | **2.4** | |  |

***Region: Sarawak (Eastern)***

***Elevation: 17.0m***

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | **Direction** | **Mean Speed (m/s)** | | **N** | **2.5** | | **NE** | **2.2** | | **E** | **1.6** | | **SE** | **1.8** | | **S** | **1.9** | | **SW** | **2.6** | | **W** | **2.9** | | **NW** | **2.9** | |  |

***Region: Sabah***

***Elevation: 2.14 m***

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | **Direction** | **Mean Speed (m/s)** | | **N** | 2.3 | | **NE** | 2 | | **E** | 2.1 | | **SE** | 1.9 | | **S** | 3.1 | | **SW** | 3.1 | | **W** | 1.8 | | **NW** | 2 | |  |